

REMARKS

Claims 1-10 remain in this application.

Initially, Applicant would like to express his appreciation to the Examiner for indicating the allowability of the subject matter of claim 1, 3-4 and 6-10.

Upon entry of the present amendment, claims 2, 5, 6 and 8-10 will have been amended. Applicants respectfully submit that all pending claims are now in condition for allowance.

In the above-referenced Official Action, the Examiner objected to the drawing as failing to comply with 37 CFR 1.84(p)(4), because reference character "34" in Fig. 5 was used to designate both X-scanner and Y-scanner. Applicants submit a revised drawing with this response, in which X-scanner is labeled as "32", and accordingly, Applicants respectfully submit that the basis for the objection has been eliminated.

In the above-reference Official Action, the Examiner objected to the abstract of the disclosure, because the abstract should be in narrative form and generally limited to a single paragraph. Applicants submit a substitute Abstract with this response, in narrative form and in a single paragraph, and accordingly, Applicants respectfully submit that the basis for the objection has been eliminated.

The Examiner also objected to the specification because of the minor grammatical informalities. Applicants have amended the noted paragraphs to correct those minor editorial problems.

The Examiner rejected claims 2 and 5 under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly point out and distinctly claim the subject matter which applicant regards as the invention, and also as being incomplete for omitting essential steps, such omission amounting to a gap between the steps.

Applicant amend claim 2 in order to clarify the claimed subject matter of the present invention, and to include all essential steps. Accordingly, Applicants respectfully request the Examiner withdraw the rejection under 35 U.S.C. §112, second paragraph. Applicants have also amended claims 5, 6 and 8-10 to eliminate minor language informalities.

The Examiner rejected claims 2 and 5 under 35 U.S.C. § 103(a) as being unpatentable over Karaki (U.S. Patent No. 5,224,382). Applicants respectfully traverse this rejection, at least for the following reasons stated below.

Claim 2 has been amended to more clearly define the features of the invention and to more clearly distinguish over the applied prior art reference by reciting, inter alia, generation of a Gaussian beam by transmitting light to a convex surface of the lensed fiber to focus the Gaussian beam, and receiving of the Gaussian beam reflected from the material with the lensed fiber moving vertically with respect to the material.

Karaki discloses a scanning acoustic microscope with an acoustic lens with ultrasound incident on the end surface. Such a lens is used with an ultrasound receiver having a flat surface. However, the lens of Karaki is a concave lens, as clearly shown, for example, in Fig. 1 of Karaki, and col. 4, line 52. Such a concave lens satisfies transmitting conditions using a reflecting angle with the flat receiving surface. In other words, Karaki does not disclose a convex lens for focusing light.

In contrast, in the present invention, as recited in the amended claim 2, the Gaussian beam is generated by transmitting light to a convex surface of the lensed fiber to focus the Gaussian beam (See Fig. 1). Due to the use of the convex surface, no other component (such as a flat receiving surface, as in Karaki) is required to focus the Gaussian beam (satisfy reflecting conditions). In addition, the lensed fiber moves vertically with respect to the material to detect (i.e. receive) the reflected Gaussian beam from the material. On the contrary, Karaki uses movement of the lens to satisfy transmitting conditions.

Thus, Karaki does not teach generating a Gaussian beam by transmitting light to a convex surface of the lensed fiber to focus the Gaussian beam, and receiving the Gaussian beam reflected from the material with the lensed fiber being moved vertically with respect to the material.

Claim 5 depends from claim 2. Accordingly, Applicants submit that claim 5 is patentably distinct over the cited art, at least based upon the recitations of claim 2.

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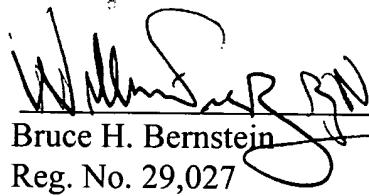
In view of the herein contained amendments and remarks, Applicants respectfully request reconsideration and withdrawal of previously asserted rejections set forth in the Official Action of August 25, 2003, together with an indication of the allowability of all pending claims, in due course. Such action is respectfully requested and is believed to be appropriate and proper.

In response to the Examiner's statement of reasons for allowance, in the above-referenced Official Action, Applicants wish to clarify the record with respect to the basis for the patentability of claims in the present application. In this regard, while Applicants do not disagree with the Examiner's indication that certain identified features are not disclosed by the reference, Applicants submit that the claims in the present application recite a combination of features, and that the basis for patentability of each of these claims is also based on the particular totality of the features recited therein.

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Should the Examiner have any questions or comments regarding this Response, or the present application, the Examiner is invited to contact the undersigned at the below-listed telephone number.

Respectfully submitted,
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Attachments: Replacement Sheet (1)
Annotated Sheet (1)

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